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15 June 1964

Trip Report

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5/10 - 6/1/64

Introduction

This report will cover the material handling and treatment during the and also present recommendations for future operations of a similar nature. 25X1

Preparation

Once under way, the first task involved uncrating the equipments and supplies and moving them to the IOIC area. We had come prepared to handle up to five missions of either the Delta II or "B" configurations plus the tracker. Because of the limited storage space available in the IOIC area, Mr decided only the essential equipments, supplies, and materials be moved - the remainder to be left in the main storage area. The large crates were opened and the smaller boxes removed to be transported up the elevator and then via "work party" down a ladder and through the passageway to their destination.

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Coordination

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Mr. convened a meeting of the configuration, treatment, and customer groups for the purpose of coordinating this phase of the operation. At this meeting we were told top priority was assigned to the main material (tracker secondary). We were to plan for the Delta II configuration and would have 36 hours notice of a change in plans to "B" configuration. The meeting was adjourned to the ASSC area where the configuration groups demonstrated and explained their equipments. This was the beginning of a very gratifying working arrangement between the configuration and material treatment groups. For the actual operation it was decided the configuration magazines containing the material would be removed

from the Article, wrapped in blankets, and hand carried to the IOIC area. The material would be prepared for treatment directly from the configuration magazine. The configuration group offered to loan us a magazine to assist in making up the presplice work place.

At a later meeting, the same day, the customers also agreed they could use the same size reels during readout as were required by the treatment machines. The important interfaces between configuration and material treatment, and between material treatment and the customer had thereby been established at an early date.

Installation of Equipment and Work Places

The next phase involved setting up the necessary work places in the IOIC area and modifying existing equipment in that area to handle the type of material used in this operation. This consisted of the following:

1. Assemble a presplice work place.

2. Assemble and install a solution mixing and distribution system.

3. Assemble a material identification work place.

4. Set up a material titling work place.

5. Set up and calibrate Quality Control equipment.

In accordance with prior arrangements, all of the equipment had previously been removed from one of the rooms in the IOIC area. The presplice work place was assembled in this room using a borrowed cabinet, two plywood tops from packing crates, two brackets and two clamps fabricated in available shops, plus the essential equipment brought along to perform this operation.

Since the material used in the Delta II configuration requires different treatment than that normally provided by the IOIC machines, it was necessary to make minor modifications to those machines to introduce a third treatment bath. A solution mixing and distribution system was assembled from equipment components brought along for this purpose. As a necessary expedient, this mixing and distribution system was squeezed in between two of the treatment machines.

A third packing crate top was used for mounting the equipments needed for the identification work place. Because of the fire hazards, wood is not a readily available commodity and metal sheets of the size required were not available - hence the liberal use of packing crate materials.

The material titling work place was designed as a portable unit. Little time was required to set it up.

The host organization accommodatingly removed a piece of their equipment from their data reduction and retrieval room so that a table would be available for the Quality Control Equipment.

Boxes of operating supplies were stored in the Briefing Room. The IOIC area by itself is beautiful in appearance; all of the additions made necessary by this operation only detracted from that appearance.

Testing Phase

As soon as work places were assembled, testing was started immediately. Considerable test material had been brought along for this purpose. In addition, the configuration group obligingly supplied considerable material which collected as a result of their testing of the configuration. This testing phase was probably the second most important part of the entire operation. During the next few days approximately 18 problems were detected, identified, and solved. At one time problems were being identified and solved at the rate of one every three hours. Not all of the problems were within our control, but those who could correct the problems did so with dispatch.

Scheduling

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Mr. [redacted] conducts a precision operation. A schedule was prepared, at his request, which programmed the operations in our area from the time the material was received until it was delivered to the customer. The time required for material treatment is largely a direct function of the length of material to be handled. Two schedules were submitted to Mr. [redacted] based on two different lengths of material which bracketed the actual production length.

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Production

Two missions were handled, both of which were handled very well. Because the tracker material required different treatment than

the Delta II material, three treatment machines were used, two for the main material and one for tracker material.

Our inspection of the finished material identified two types of defects associated with the raw material, five with the configuration, and one from our operation. The latter defect was a faint abrasion on the support side caused by the customer's equipment.

There were two differences between the first and second missions. The product aim for the first mission was established on the basis of data supplied. The results, while very satisfactory, were not optimum for assurance of complete information content. Based on the experience of the first mission, the aim point for the second mission was established slightly higher. While the two aim points differed, the conformance of the product to the aim point for each mission was as good as one could expect to achieve.

The second change between the two missions involved handling of the material in the finishing operations. The customer pointed out that the message to Hq's could be expedited if the material were delivered to him prior to performing the last two operations - titling and inspection. The customer's request was honored.

In addition to the time saved by postponing two of the operations, the second mission was handled more expeditiously than the first, resulting in an additional time savings of 1 hour and 45 minutes. The actual delivery times to the customer, from the time of receipt of the material, were as follows:

	Mission #1	Mission #2
Delivery of first unit	5 hrs. 14 min.	2 hrs. 50 min.
Delivery of all main material	8 hrs. 30 min.	4 hrs. 53 min.

It should be pointed out that the solution mixing and the machine operation functions were performed by personnel supplied by the host organization and were under the immediate supervision of Mr. [redacted] That crew performed flawlessly.

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The Quality Control, presplicing, identification, titling, inspection, and maintenance functions were performed by experienced personnel taken along for this purpose. While these men were "old pros", they still played it as though this were the final game of a tournament.

The host organization, at the outset, expressed the desire to handle the next operation by themselves. They eagerly, and, at times, agressively participated in all phases. Mr. [redacted] is to be commended for his cooperation, his sincere suggestions, and above all his determination that there be no failure on the part of the host organization or facilities.

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Shipment

25X1 Based on Mr. [redacted] decision, the material was divided into two packages for shipment - the forward material from both missions in one package and the aft material from both missions in the other. If either package survived shipment, the major portion of information from the entire operation would be available.

Disposition of Equipments and Materials

25X1 In accord with a message received and in conformance with Mr [redacted] instruction, the following disposition was made of equipments, materials, and supplies.

1. Chemicals of use to the host organization were left there.

25X1 2. Other chemicals were crated for shipment to and storage at Mr. [redacted] base.

3. Supplies used, but not expended (reels and cans), were divided equally between the two organizations.

4. Unused supplies were returned to the supplier.

5. Prototype equipment and unused spare parts were returned to the original owner.

Security

The host organization has a classified waste disposal system which consists of placing the material in heavy paper bags and stapling the bags closed. These bags of classified waste are then conveyed via "work party" to the incinerator where cleared personnel do the burning in an incinerator reserved for this operation to the exclusion of all others. This system is entirely adequate for their operation.

For the type of operation involved in this case, where even the type of material used is classified, the classified waste disposal system is not adequate. The "work party" forms a chain of men and the bags are tossed from man to man down the ladders and through the passageways. Occasionally a bag is dropped or can be ripped, revealing the nature of the contents but not necessarily the information content.

Originally my primary concern about the classified waste disposal system centered around the temperature of the fire in the incinerator - would it completely consume the type of material being disposed of. It did. The "work party" technique and the breaking of the bags was not anticipated. The revelation of the type of material was not inconsistent with the type of material that one would normally expect from the IOIC area. The fact civilians were in the IOIC area and the equipments they were dealing with probably revealed the type of material involved long before the incident of the disposal of classified waste.

Future Operations

The only certainty about future operations is that change is inevitable - and for the most part desirable. The ASSC area, which was vacant this time, will shortly be filled with equipment. If the RA5C program is operational next time the IOIC area cannot tolerate the clutter, disruption, and alteration necessitated by the last operation. The most difficult situation would exist if the base of operations carried the normal compliment necessitated by a JCS assignment plus the RA5C program.

Several plans were considered. An ideal layout could be arranged in the ASSC area, but that area is to be filled with equipment. The Photo Lab down below has available space but not enough for this type of an operation. Material and supply handling to and from the Lab, plus Security, would be problems.

A survey was made of the existing void spaces. Most of the voids shown on the available drawings have been occupied, or contain material storage, or are spoken for. In addition to these voids being very inaccessible, there are protrusions which chop up the areas and would make operations difficult.

On the surface it would appear that the best plan would be one which fused this type of operation with the RA5C program. Close scrutiny of the two programs, however, reveals far more differences than similarities. To begin with, one program produces large scale, low definition material and the other small scale, high definition material. The title block is inherent in the material in one case and externally applied in the other. There are no work places which are common to both programs. The only thing in common are the treatment machines, and even here the actual treatments are sufficiently different that the IOIC machines had to be modified for the exercise just concluded.

A part of the planning for future operations must include consideration of what the output or products should be. It is recommended that the customer be provided with an identified and titled DP from which to make the readout. In addition, it is recommended that a second DP and a DN be produced to be retained by the host organization. These are something they believe they want, but far more important, these would be invaluable insurance in the event the ON and first DP were lost in shipment. In summary, it is recommended that the production for future operations include:

1. An identified and titled ON.

2. Two DP's.

3. A DN.

As for where this production should be accomplished, the best plan appears to be one which incorporates all of the required equipments in 2 or 3 trailers or huts to be located in the vicinity of the Article. All of the equipments, materials, and supplies could be pre-loaded and positioned in the trailers. The entire operation would be ready to use in just a few hours. Everything would be in one area, which would facilitate coordination and minimize security problems.

More detailed studies are currently being made of the equipments, materials, and supplies needed to support 5 and 10 missions during a similar type of operation. Our recommendations, based on those studies will be submitted in the near future.

Configuration Recommendations

A trailer, or hut, appears to be the answer to the configuration storage problem also. The past operation demonstrated that the configuration needs to be kept in a clean area at ambient temperature and with good humidity control. All of these could easily be accomplished in a trailer. The check out equipment for the configuration would also be housed in this trailer. The past operation proved the value of having the configuration and treatment groups working in close cooperation. A compound of trailers near the Article would enhance this.

The Delta II configuration appears to be a going concern. A few changes can be suggested which might help perfect the design. It is understood they plan to enclose the material transport region with a epoxy fiberglass (or better still a Royalite) cover. This would be a good improvement.

The seven 90^{o} twists which the material makes from supply to take-up cause buckles in the material. These buckles occasionally produce defects known as "kinks". What is more important, they probably produce temporary deformation of the material which, during the critical operation, can result in the areas which the customer refers to as "soft spots". Twister designs exist which probably would eliminate the buckling of the material and the resultant defects.

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